



INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
Form PTO-1449 (Modified)  
(Use several sheets if necessary)

COMPLETE IF KNOWN

Application Number	10/056,998
Confirmation Number	3516
Filing Date	January 25, 2002
First Named Inventor	Ohan, Mark P., et al.
Group Art Unit	1615
Examiner Name	
Attorney Docket No.	54704.8042.US01

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Sheet 1 of 1

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	U.S. Patent or Application		Name of Patentee or Inventor of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Figures Appear
		NUMBER	Kind Code (if known)			
PBP	AA	5,718,012		Cavallaro, John F.	5/28/1996	
NMN	AB	5,308,889		Rhee, Woonza, et al.	12/2/1992	

FOREIGN PATENT DOCUMENTS

Examiner Initial	Cite No.	Foreign Patent or Application			Name of Patentee or Applicant of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Figures Appear	T
		Office	NUMBER	Kind Code (if known)				

OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.	T

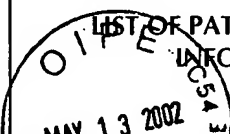
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*Luis Ghal*

DATE CONSIDERED

*01/22/04*

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<b>FORM PTO-1449</b> 	<b>ATTY. DOCKET NO.</b> 270/275		<b>SERIAL NO.</b> 10/056,998
	<b>APPLICANT:</b> Michael G. Dunn et al.		
	<b>FILING DATE:</b> January 25, 2002	<b>GROUP:</b>	

**LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S  
INFORMATION DISCLOSURE STATEMENT**

(Use several sheets if necessary)

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES NO
	AE						
	AF						
	AG						

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)**

	AH	Chvapil M, Kronenthal RL, Winkel WV. Medical and surgical applications of collagen. In: Hall D, Jackson D, eds. International review of connective tissue research. New York: Academic Press; 1973. p 1-61
	AI	Stenzel KH, Miyata T, Rubin AL. Collagen as a biomaterial. Ann Rev Biophys Bioeng 1974;3:231-253
	AJ	Miyata T, Taira T, Noishiki Y. Collagen engineering for biomaterial use. Clin Mater 1992;9:139-148
	AK	Rault I, Frei V, Herbage D, Abdul-Malak N, Huc A. Evaluation of different chemical methods for cross-linking collagen gel, films and sponges. J Mater Sci Mater Med 1996;7:215-221
	AL	Yannas IV. Natural Materials. In: Ratner BD, Hoffman AS, Schoen FJ, Lemons JE, eds. Biomaterial science: An introduction to materials in medicine. San Diego: Academic Press; 1996. p 84-94
	AM	Waddock K, Olsen RM, Silver FH. Evaluation of collagen crosslinking techniques. Biomat Med Dev Art Org 1984;29:1373-1379
	AN	Nimni ME, Cheung D, Strates B, Kodama M, Sheik K. Bioprosthesis derived from crosslinked and chemically modified collagenous tissues. In: Nimni ME, eds. Collagen, Vol. III: Biotechnology. Florida: CRC Press, Inc.; 1988. p 1-37
	AO	Simmons DM, Kearney JN. Evaluation of collagen crosslinking techniques for the stabilization of tissue matrices. Biotechnol Appl Biochem 1993;17:23-29
	AP	Khor E. Methods for the treatment of collagenous tissues for bioprostheses. Biomaterials 1997;18(2):95-105
	AQ	Yannas IV, Tobolsky AV. Crosslinking of gelatine by dehydration. Nature 1967;215:509-510

**EXAMINER:**

*Iris Ghal*

**DATE CONSIDERED:**

*01/22/04*

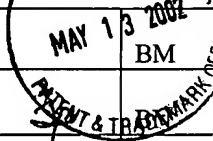
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	<b>FILING DATE:</b> January 25, 2002	<b>GROUP:</b>

AR	Robin AL, Riggio RR, Nachman RL, Schwartz GH, Miyata T, Stenzel KH. Collagen materials in dialysis and transplantation. Trans Amer Soc Artif Int Organs 1968;14:169-175
AS	Gorham SD, Light ND, Diamond AM, Willins MJ, Bailey AJ, Wess TJ, Leslie NJ. Effect of chemical modifications on the susceptibility of collagen to proteolysis. II. Dehydrothermal crosslinking. Int J Biol Macromol 1992;14:129-138
AT	Huang-Lee LH, Cheung DT, Nimmi ME. Biochemical changes and cytotoxicity associated with the degradation of polymeric glutaraldehyde derived crosslinks. J Biomed Mater Res 1990;24:1185-1201
AU	Weadock KS, Miller EJ, Bellincampi LD, Zawadsky JP, Dunn MG. Physical crosslinking of collagen fibers: comparison of ultraviolet irradiation and dehydrothermal treatment. J Biomed Mater Res 1995;29:1373-1379
AV	Weadock KS, Miller EJ, Keuffel EL, Dunn MG. Effect of physical crosslinking methods on collagen-fiber durability in proteolytic solutions. J Biomed Mater Res 1996;32:221-226
AW	Fu M-X, Wells-Knecht KJ, Blackledge JA, Lyons TJ, Thorpe SR, Baynes JW. Kinetics, mechanisms, and inhibition of late stages of the maillard reaction. Diabetes 1994;43:676-683
AX	Vlassara H, Bucula R, Striker L. Pathogenic effects of advanced glycosylation: biochemical, biologic, and clinical implications for diabetes and aging. Lab Invest 1994;70(2):138-151
AY	Monnier VM, Glomb M, Elgawish A, Sell DR. The mechanism of collagen cross-linking in diabetes. Diabetes 1996;45(S67-S72)
AZ	Sajithal GB, Chithra P, Chandrakasan G. Advanced glycation end products induce crosslinking of collagen in vitro. Biochim Biophys Acta 1998;1407:215-224
BA	Girton TS, Oegema TR, Tranquillo RT. Exploiting glycation to stiffen and strengthen tissue equivalents for tissue engineering. J Biomed Mater Res 1999;46:87-92
BB	Fujimori E. Cross-linking and fluorescence changes of collagen by glycation and oxidation. Biochim Biophys Acta 1989;998:105-110
BC	Baynes JW. Role of oxidative stress in development of complications in diabetes. Diabetes 1991;40:405-412
BD	Chace KV, Carubelli R, Nordquist RE. The role of nonenzymatic glycosylation, transition metals, and free radicals in the formation of collagen aggregates. Arch Biochem Biophys 1991;288(2):473-480
BE	Elgawish A, Glomb M, Friedlander M, Monnier VM. Involvement of hydrogen peroxide in collagen cross-linking by high glucose in vitro and in vivo. J Biol Chem 1996;271(22):12964-12971
BF	Carbonare MD, Pathak MA. Skin photosensitizing agents and the role of reactive oxygen species in photoaging. J Photochem Photobiol B: Biol 1992;14:105-124
BG	Ryu A, Naru E, Arakane K, Masunaga T, Shinmoto K, Nagano T, Hirobe M, Mashiko S. Cross-linking of collagen by singlet oxygen generated with UV-A. Chem Pharm Bull 1997;45(8):1243-1247
BH	Koide T, Daito M. Effects of various collagen crosslinking techniques on mechanical properties of collagen film. Dent Mat J 1997;16(1):1-9
BI	Kuntz E. Studies on mechanism of photosensitized crosslinking of collagen. Radiation Research 1962;16:568
BJ	Bailey AJ, Rhodes DN, Cater CW. Irradiation-induced crosslinking of collagen. Radiation Research 1964;22:606-621
BK	Hans S, Blumenfeld O, Seifter S. Specific identification of collagens and their fragments by clostidial collagenase and anti-collagenase antibody. Anal Biochem 1992;201:336-342
BL	Wolff SP, Dean RT. Fragmentation of proteins by free radicals and its effect on their susceptibility to enzymic hydrolysis. Biochem J 1986;234:399-403

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	BM	Stryer L. Biochemistry. 3rd ed. New York City, W.H. Freeman and Company
		Bunn HF, Higgins PJ. Reaction of monosaccharides with proteins: possible evolutionary significance. Science 1981;213:222-224
	BO	Wolff SP, Dean RT. Glucose autoxidation and protein modification: the potential role of autoxidative glycosylation in diabetes. Biochem J 1987;245:243-250
	BP	Tian S-F, Toda S, Higashino H, Matsumura S. Glycation decreases the stability of the triple-helical strands of fibrous collagen against proteolytic degradation by pepsin in a specific temperature range. J Biochem 1996;120:1153-1162
	BQ	Curran SF, Amoruso MA, Goldstein BD, Berg RA. Degradation of soluble collagen by ozone or hydroxyl radicals. FEBS 1984;176(1):155-160
	BR	Davies KJA. Protein Damage and Degradation by Oxygen Radicals. J Biol Chem 1987;262(20):9895-9901
	BS	Yu BP. Cellular defenses against damage from reactive oxygen species. Physiological Reviews 1994;74(1):139-162
	BT	Monnier VM, Kohn RR, Cerami A. Accelerated age-related browning of human collagen in diabetes mellitus. Proc Natl Acad Sci 1984;81:583-587
	BU	Brownlee M, Vlassara H, Kooney A, Ulrich P, Cerami A. Aminoguanidine prevents diabetes-induced arterial wall protein cross-linking. Science 1986;232:1629-1632
	BV	Miles C, Sionkowska A, Hulin S, Sims T, Avery N, Bailey A. "Identification of an intermediate state in the helix-coil degradation of collagen by ultraviolet light," J Biolog Chem, 275,(42):33014-33020 (2000.)
	BW	Friess W. "Collagen- Biomaterial for drug delivery" Eur J Pharm Biopharm, 45:113-136 (1998.)
	BX	
	BY	
	BZ	

<b>EXAMINER:</b> <i>Isis Ghali</i>	<b>DATE CONSIDERED:</b> <i>01/22/04</i>
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